Quarter 1 Perchlorate Meeting, Westford Town Hall, Meeting Room Tuesday, April 10, 2012 at 6:00 pm

6:00-6:05

- Introduction by Jodi Ross, Town Manager, and John Thompson of Woodard & Curran, Licensed Site Professional (LSP)
- John Thompson explained role of LSP: licensed by the State to oversee and approve of cleanup and monitoring activities; discussed the transport of groundwater and perchlorate through fractured bedrock and how the results of sampling allow tracking of perchlorate through time

6:05-6:10

• Historic database – discussion of perchlorate data organized by street address; complete data sets permit evaluation of trends of perchlorate within a particular season and from year to year

6:10-6:15

- Data gaps from previous sampling results created uncertainty in identifying trends in perchlorate at each sampling location and for the entire plume
- Data gaps need to be filled by subsequent sampling, which prolongs the length of the investigation; more cooperation is advantageous for everyone involved
- Conclusions about perchlorate are less reliable until at least one year or more of complete data are available, past data are helpful and will be included with results
- A review of the 2011 results map of sampling locations illustrated perchlorate data, this was used to show the variation in frequency of sampling based on property access
- Effective communication will make project more efficient: granting access for groundwater samples, and quarterly public meetings are offered for discussing results and answering questions
- John Thompson introduced Andrea Eagan, MPH, of Woodard & Curran who will evaluate the public health issues related to perchlorate, Andrea is also a contact for questions from the public

6:15-6:25

- Highway Garage Treatment System: two recovery wells pump groundwater to treatment system, which removes perchlorate from groundwater using specialized resin
- Proposed work to identify which fracture zones transmit the groundwater containing perchlorate, which may aid in determining remedial response actions
- Rain water and snowmelt will dilute perchlorate over time, but the degree of dilution can only be determined with complete data from multiple wells

6:25-6:30

- Nutting Treatment Plant: sand and gravel aquifer, not bedrock; perchlorate impact from old data is likely from discharge of drainage from the Highway Garage; monitoring wells surrounding the supply wells will be sampled quarterly to evaluate the trend of perchlorate in the valley aquifer system
- Reports due to the State by November 1 2012:
 - 1. Phase II Addendum the nature and extent of perchlorate in the study area
 - 2. Phase III Remedial Action Plan options for handling the perchlorate
 - 3. Phase IV Remedy Implementation Plan option from Phase III is selected, designed, and put to use

6:30-6:32

- Access agreement with On-Site Engineering is explained, including correction in Woodard and Curran phone number should be 781-251-0200
- Signed access agreements should be mailed to On-Site or given to the sampling team

6:32-7:15 – Jodi Ross opened the meeting to questions from the audience

- Question 1: My home is routinely sampled, but I don't seem to be any closer to being able to drink water. What is different about the Town's new LSP? Currently I am drinking bottled water. When will I be able to drink water from my well?
 - O Answer: Residence 1 is near the edge of the northerly traveling perchlorate plume, so monitoring is necessary to evaluate the migration of perchlorate. The LSP recommends two or three more data sets be collected for this location; future options include bottled water or municipal water, among others. Selection of options will be made by the Town when complete data sets are made available. Perchlorate cleanup work may be ongoing for 10 years or more, but the nature of work may not require the same level of effort in the future as compared with today.
- Question 2: How will you evaluate remediation options by November if data sets are incomplete?
 - o Answer: Timelines are strict, and whatever data are available will be used for reporting; subsequent results will be used for confirmation. A temporary solution known as a Class C Response Action Outcome (RAO), with continued monitoring, likely will be used over time to allow for continued monitoring of the perchlorate concentrations in groundwater, even after reports are completed and filed with MassDEP.
- Question 3: What is the history of the perchlorate plume? Is there a detailed map of perchlorate?
 - Answer: The plume appears stable since sampling began, small changes may be evident due to seasonality. A map of the perchlorate concentrations will be available after each quarterly sampling event of 2012.
- Question 4: Why was our well removed from the sampling program? There are continuous data from our well, but not from our neighbors.
 - Answer: The residence is between two other homes which are proposed to be monitored for perchlorate, and not all houses in each cluster need to be sampled. This location can continue in the sampling program if it is not possible to sample the adjacent properties and this resident is willing to be in the sampling program. A letter will be sent to residents who were removed from the sampling plan.
- Ouestion 5: When will the updated online database be available?
 - O Answer: In the past, the LSP and consulting firm have managed the data. The Town Engineering office is working with Woodard & Curran jointly to produce maps for the town. Updated maps showing the perchlorate data are being prepared immediately and will be posted. The email distribution list should be up and running and will be used to communicate additions/updates to the online database. Anyone wishing to be added to the e-mail list should contact Andrea at Woodard & Curran at 781-251-0200.
- Question 6: The data at my well do not exceed 2 ppb, but data from my neighbors' wells do. If I hydrofracture my well and the concentration then exceeds 2 ppb, who is at fault?
 - O Answer: The LSP would not recommend hydrofracturing bedrock because it may make conditions worse. As a result of the MCP process, additional uses for wells may be identified that are acceptable to the town and to individual homeowners.
- Ouestion 7: How much does a perchlorate sample cost?
 - Answer: The cost for each sample is about \$100 for the analysis, not including the cost of the sampling crew. All sampling is conducted by a separate contractor to the Town at no cost to residents; Woodard & Curran does not benefit financially from the sampling or analysis of perchlorate and has no business relationship to the sampling contractor.
- Question 8: Due to perchlorate in my water, I no longer drink from my well. May I use my well water to irrigate my lawn?
 - o Answer: Watering lawns with water from the well is not recommended at this time, but may be acceptable following further review under the MCP process. Use of residential wells for other purposes, such as irrigation, will be included in the reporting to MassDEP in 2012. Residents will be informed of uses acceptable under the MCP and acceptable to the town.

7:15 – Jodi Ross thanked the audience and the meeting was concluded.

fre f. Thomps 4/19/2012

John A. Thompson, LSP

Jodi Ross, Town Manager